

BEFORE THE

Federal Communications Commission **RECEIVED**

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MAY 28 1993

FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

In the Matter of)

Replacement of Part 90 by Part 88)
to Revise the Private Land Mobile)
Radio Services and Modify the)
Policies Governing Them)

PR Docket 92-235

To: The Commission

COMMENTS OF
AMERICAN METER COMPANY

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SUMMARY

American Meter Company is a manufacturer of meter reading equipment used by utility companies. AMC holds a nationwide Business Radio Service license in the 450 MHz band for operation of the above-referenced automatic meter reading system. Accordingly, as a licensee in the 450 MHz band, and as a manufacturer of equipment operating in this band, AMC is concerned that portions of this Commission proposal would undermine the use and effectiveness of its innovative technology.

AMC believes that the Commission should delay the implementation of 6.25 kHz bandwidths in the 450-470 MHz band until after the initial channel splitting to 12.5 kHz occurs. AMC is concerned whether there will be a need to make this second channel split, and AMC is also concerned with its technical feasibility.

Moreover, since AMC shares its nationwide license with its utility customers, and since it does not want to be an SMR or a private carrier, it opposes the Commission's proposal to eliminate the ability of a 450 MHz licensee to share its radio facilities on a non-profit, cost shared basis.

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**COMMENTS OF
AMERICAN METER COMPANY**

American Meter Company ("AMC"), by its attorneys and pursuant to Section 1.415 of the Rules and Regulations of the Federal Communications Commission ("Commission" or "FCC"), hereby submits these Comments in response to the Notice of Proposed Rulemaking, adopted by the Commission on October 8, 1992 in the above-styled proceeding.^{1/}

I. PRELIMINARY STATEMENT

1. AMC is a manufacturer of meter reading equipment used by utility companies nationwide in their interrogation of utility meters. AMC is an innovator in meter reading equipment, and has developed a radio-based automated meter

^{1/} Notice of Proposed Rule Making, PR Docket No. 92-235, 57 Fed. Reg. 54034 (November 16, 1992) (NPRM).

reading system which electronically reads residential and commercial utility meters from either a hand-held program interrogator or a mobile interrogation unit.

2. AMC holds a nationwide Business Radio Service license in the 450 MHz band for operation of its automatic meter reading system. As a licensee in the 450 MHz band, and as a manufacturer of equipment operating in that band, AMC is concerned that the proposed Part 88 rules could potentially undermine the use and effectiveness of its innovative meter reading technology. Accordingly, AMC files these Comments to address the Commission's intention to ultimately reduce bandwidths for channels in the 450-470 MHz to 6.25 kHz, and to eliminate current shared use provisions.

II. BACKGROUND

3. In this NPRM, the Commission has proposed a series of major changes to the regulations of PLMR services below 512 MHz. Most significantly, the Commission proposed spectrum efficiency standards so as to increase the number of available channels by reducing channel spacing to 6.25 kHz or less. Second, the Commission proposed a channel exclusivity option in the bands above 150 MHz using the

"exclusive use overlay" approach. Third, the Commission proposed to consolidate 19 radio services into three broad radio services plus a General Category Pool which encompasses all three radio services. Finally, the Commission proposed new technical and operational standards, such as reducing permissible transmitting power levels.

4. AMC generally supports the Commission's NPRM. It recognizes that there is a need to promote more efficient use of the frequency bands below 512 MHz allocated to the private land mobile radio (PLMR) services. AMC agrees with the Commission that the spectrum in these bands is becoming extremely congested, and in order to accommodate future uses, refarming of this resource should occur.

5. However, AMC believes that the proposed transition to 6.25 kHz channels for operations in the 450-470 MHz bands by 2004 is unreasonable. AMC also believes that the Commission's proposal to eliminate the current non-profit shared use provisions found in Section 90.179 is not in the best interest of the land mobile community.

III. COMMENTS

**A. The Commission Should Withhold
Conversion to the Narrower 6.25 kHz
Bandwidths in the 450-470 MHz Band Until
a Further Study is Conducted to
Determine Necessity and Technical
Feasibility**

6. The Commission has proposed to require licensees in the 450-470 MHz band to reduce their channel bandwidths to 12.5 kHz by January 1, 1996. The Commission further proposes to reduce the bandwidths in this band to 6.25 kHz as early as 2004 for the top 15 markets. Initially, AMC would like to stress that the wave of future communication technology is data transmissions. Many private land mobile operations are being converted to data transmission, while voice transmission is becoming more obsolete. All transmissions, especially data, cannot easily operate on narrower bandwidths. In fact, emerging technologies such as imaging and high-speed data facsimiles cannot easily be accommodated on narrower bandwidths. Therefore, AMC first recommends that the Commission consider maintaining some wideband channels in the 450-470 MHz band for data transmissions.

7. Cognizant of the need for efficient use of spectrum, AMC is already transmitting data through a

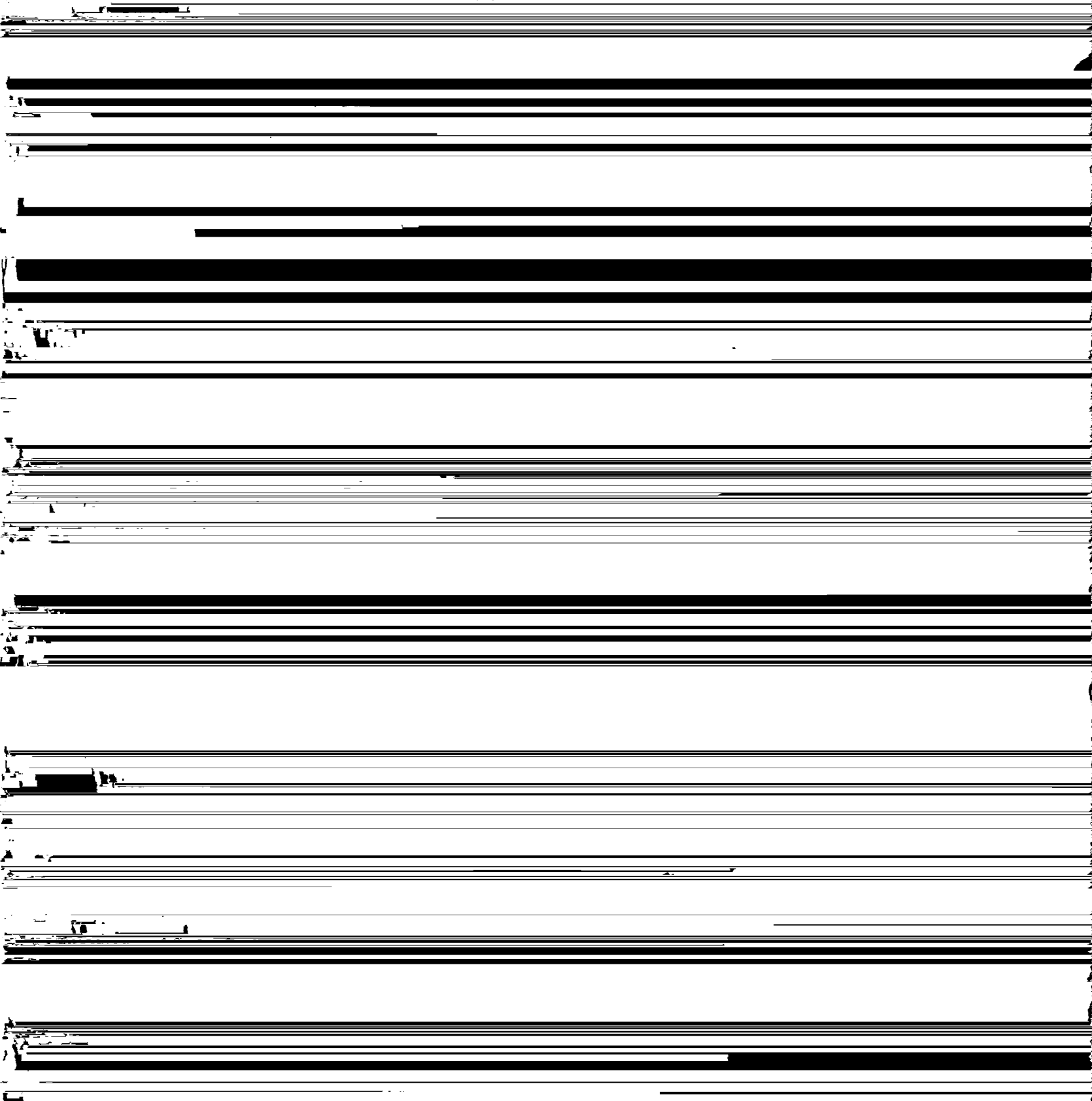
narrower 12.5 kHz bandwidth. However, the high-speed data rates used by AMC cannot be transmitted in a bandwidth of 6.25 kHz. The commercial and residential meters that receives and transmits the data for monthly billing employ a low-powered Part 15 device that once installed is in service for 15 years. Due to the high demand for automated meter reading equipment by its utility customers, AMC is installing these devices at a rate of 50,000 to 100,000 units per year. Compatibility between AMC's transmitter and each utility meter must be maintained in order for the system to function properly. Therefore, the high-speed data rates cannot be changed without having to replace each Part 15 device in all utility meters. Such a change would be prohibitively expensive and disruptive to its utility customers.

8. Moreover, transmitting data communications across narrowband channel is counterintuitive to the goal of efficient use of the spectrum. By forcing licensees to use narrower bandwidth, the Commission is also creating slower transmissions of data which simply occupies the bandwidth for longer time periods. In a shared environment, this will potentially create more interference problems between co-channel licensees. Therefore, AMC believes that the

Commission's ultimate goal of reducing the bandwidths to 6.25 kHz channels is short-sighted.

9. AMC also believes that the Commission's proposal to further reduce the channel bandwidth to 6.25 kHz is premature. Requiring a bandwidth reduction to 6.25 kHz as early as 2004 is too disruptive for the PLMR community, and is unreasonable under the current channelization scheme. Further, it may not be necessary to reach a 6.25 kHz bandwidth. The first channel split may provide sufficient spectrum for the PLMR community. Second, it may be technically infeasible for some PLMR licensees to further reduce their channel bandwidths. AMC, therefore, recommends that the Commission revisit the 6.25 kHz channeling plan after the initial proposed channel split to 12.5 kHz.

10. Moreover, the Commission must give PLMR licensees the opportunity to amortize their existing equipment. AMC, like many PLMR licensees, has recently invested millions of dollars in new state-of-the-art equipment for operation in the 450 MHz band. To require licensees to transition to 6.25 kHz equipment as early as 2004 will not provide AMC (or surely other PLMR licensees) the full life use of their equipment. Second, the proposed transition date to convert to 6.25 kHz bandwidth will not provide PLMR licensees with



B. The Commission Should Maintain its Existing Provisions for Shared Use of Radio Stations

12. The Commission in proposing Section 88.321 appears to eliminate the ability of a 450 MHz licensee to share its radio facilities on a non-profit, cost shared basis. The above-referenced proposed rule for shared use of radio stations states:

Licensees of radio stations authorized under this rule part may share the use of their facilities. A station is shared when persons not licensed for the station use the facilities for their own purposes pursuant to the licensee's authorization. Shared use of a radio station may be either on a private carrier basis or by selling of excess capacity.

(a) Shared use is permitted only by SMR licensees, and by Non-Commercial licensees selling excess capacity . . . , and may be on a for-profit basis.

NPRM at p. 96, § 88.321 (emphasis in the original). This section cross references Section 88.15 (c), Excess Capacity, which further limits the shared use provision by adding:

Except in the 220-222 MHz band, a licensee in the Non-Commercial Radio Service operating a system for its own internal use may lease excess capacity, provided that at least 50 percent of the mobiles in that system are for [the] licensee's own use, Only mobiles used by the licensee count towards loading.

Id. at p. 58. Based on the language of these two provisions, shared use of radio facilities can only occur if a licensee is an SMR operator, or if a Non-Commercial radio licensee leases the excess capacity on its system on a for-profit basis, provided that 50 percent of the mobile loading is the licensee's. The proposed rule excludes the provision for shared use of radio facilities on a non-profit, cost sharing basis currently found at Section 88.170 which

A station is shared when persons not licensed for the station control the station for their own purposes pursuant to the licensee's authorization. Shared use of a radio station may be either on a non-profit cost shared basis, or on a for-profit private carrier basis.

47 C.F.R. §90.179 (emphasis added). The purpose of this provision was to allow small communications entities to continue using mobile relay and community repeater systems for their own communications without the "senseless duplication of equipment and cost burden." See, New Practices and Procedures for Cooperative Use and Multiple Licensing of Stations in the Private Land Mobile Radio Services, Memorandum Opinion and Order, 48 Fed. Reg. 26617, 26618 (1983). The Commission itself acknowledged that:

For users there are no substitution costs

Id.

13. Similarly, AMC is currently sharing on a non-profit basis the use of its nationwide authorization with its utility customers. The current sharing provisions allow AMC's customers to use the equipment and radio facilities without the need for individual licensing.

14. AMC does not wish to become an SMR operator nor does not wish to become a private carrier. AMC merely seeks to provide its licensed radio facilities for its customers' use on a non-profit basis. Also, the proposed rule could mean that entities who normally would not have to apply for a license would now be among the many applicants applying for newly-created channels, unnecessarily promoting spectrum scarcity. Furthermore, the elimination of existing shared use provisions could increase the workload for the Commission. Each entity who is not sharing another licensee's facilities would have to independently apply for a license for radio facilities. Therefore, AMC recommends that the Commission continue to permit shared use of radio facilities on a non-profit, cost shared basis.

IV. CONCLUSION


15. AMC believes that the public interest will best be served by (1) issuing a further Notice of Proposed Rule Making after the initial split to 12.5 kHz bandwidth to determine the necessity and technical feasibility of converting to 6.25 kHz bandwidths, and by (2) continuing to permit non-profit shared use of radio facilities.

WHEREFORE, the premises considered, American Meter Company respectfully requests that the Commission promulgate its proposed rules consistent with the views expressed in these Comments.

Respectfully submitted,

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